302
386 (hoso´ša, J.B.; hošo´h:t, M.L.; white color, čau´ded, J.B.) was made of pulverized shells. All paints were mixed with grease for application.

302 Differences in the use of paint by men and women lay only in the method of application. The same patterns were used by both, but the solid line of pigment used by men was broken up into a line of dots by women. Red paint was smeared lightly over the face when a woman was going to end the meat tabu after pregnancy or bereavement. Any woman taking part in a dance might put on red paint this way and then add a horizontal row of white dots on each cheek.
[822] Both sexes used red and white paint, but black paint was associated with doctoring. Men with Crow totem used it, as did Bear and Coyote
[741] totemites on occasion. A doctor, when attired for a pleasure dance or display, covered his face with black paint and his body with short white diagonal stripes. Wukchumni patterns are shown in figure 4.

Paint was not used as insignia by chiefs, messengers, singers, or, in fact, by anyone. It was assumed only for dance, ritual, or gala occasion (J.B., M.L.).

Tattooing.---Many women used tattooing as a
304 permanent form of personal decoration. It was done of their own volition, usually in young womanhood but before marriage. The only motivation, other than vanity, was the belief
[827] that it prevented one from getting old and wrinkled. (M.P.). Young girls who were close friends often had themselves tattooed at the same time. Only one form of tattooing had religious significance; this was a small pattern placed on the inside of the right forearm just above the wrist. Only a few examples of this type were observed, on two Yokuts women and two Western Mono men. This spot is said to

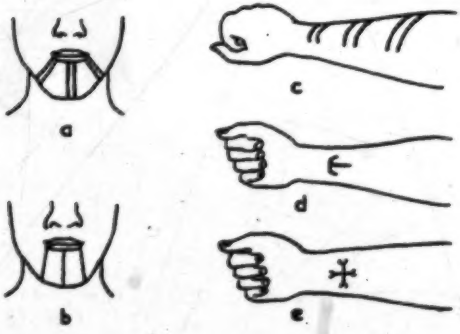

Fig. 9. Women's tattoo marks. a, c, Wukchumni (M.L.). b, d, Telamni (T.M.). e, Wukchumni (M.P.).

[P. 162 a] Kechyi

621 192 723 Star lore.---Terms used for stars, phases of sun and moon, etc., follow:

u´pːš: sun
toiyu´nam u´pːš: moon (lit , night sun)
tawa´nːš: morning star
tomo´lo´o´lohi: evening star
čaya´taš: star (general)
muxe´ma: Pleiades (lit., young girls). E.M. disclaimed all knowledge of the tale of the girls' flight from their husbands.[52] When this constellation was on the eastern horizon at dawn, the river was deep, but when it was on the western horizon at dusk, it was time to go to the river for the spring salmon run.[53]
soiyo´lui yawačːt: Milky Way (lit., antelope-place running). Antelope and deer ran a race across the sky from northeast to southwest. Deer won.
wate´lau: a shooting star. Doctors knew something about these, but "plain people wouldn't know."
we´čːn čano´´onːt: eclipse of sun or moon (lit., Condor eating). The Condor was thought to be eating the luminary; he hid it with his wings. At this time everyone went out and shouted. This shouting was led by the Nutuwich people, "the Nutuwich could holler best, the Tokel[illegible] couldn't holler very good." Coyote was n[illegible]ved in eclipses. When an eclipse of th[illegible]ccurred, a horse was killed, in additi[illegible] the shouting. The meat was eaten, the carcass being left to attract Condor away from the sun.

805 Calendar.---The year was divided into moon months (yet u´pːš, a month, lit., one moon). These had special names which E.M. forgets. It contained five weeks, that is, four weeks of six days each, and the dark of the moon (gatai´ši) counted as six days. The week (šu´man, Sp. semana?) is now said to have seven days (nu´mčːn, seven); the old week was called ču´lupai (čo´lːpi, six).

823 Earthquake.---E.M. had never heard of an earthquake in this region. (This is curious since she had such a clear memory of the Ghost Dance in 1872, the year of a violent earthquake in the San Joaquin Valley.

805 301 Snake-charm.---In the spring men and women wore abalone-shell gorgets, the glittering of which was thought to make rattlesnakes give a warning rattle (snake-charm, čune´ki).

302 386 822 192 Paint.---The colors and sources were as follows:

ho´suč: white. A clay which "the doctors got some place." They would give it to anybody

[831]

[52] One suspects reticence: the story is regarded as somewhat obscene, at least to tell to a stranger.

[53] This is approximately the same time; May 1 the Pleiades are on the eastern horizon at 6 a.m., western horizon at 6 p.m. Allowing for actual circumstances (the wall of the Sierra Nevada, what constitutes "dusk," etc.) there may have been a two-week interlude between the "time of high water" and the "time for spring salmon."

302 192 386 822 who "wanted to fix up for dances." It was associated with the Tokelyuwich moiety.

hu ´iyu: red. This doctors bought from the Western Mono; the Eastern Mono were the ultimate source. It was the Nutuwich color.

ša ´lu: black. Charcoal.

wa ´wun: green (called blue by a Wobonuch informant). It is said to have been introduced by the Paiute who brought the Ghost Dance.

302 616 Face patterns E.M. could not describe beyond this statement: that the Tokelyuwich covered the face with white and added two vertical stripes of green (black in earlier times?), and that the Nutuwich merely used red horizontal stripes.[54] She added that the Tokelyuwich sometimes put white horizontal streaks across their upper arms (but see sweat house dance). Shamans were the usual owners and traders of paint.

436 Money.--Values for clamshell disc beads were: once around the hand without crossing the wrist, 25 cents; five times around the hand, $5.00. This is incongruous, of course (see fig. 14, c, Pt. I).

802 192 Numeral system.--The usual Yokuts numerical system, based on 10, was used by Kechayi, Gashowu, and Dumna. E.M. gave the following Kechayi count:

1. yɛt	14. ha ´čpam
2. po ´noi	15. yɛ ´čam
3. so ´pɨn	16. čo ´lpop
4. hatpa ´nai	17. no ´mčom
5. yɛčɨ ´nɨl	18 mu ´nčum
6. čo ´lɨpi	19. no ´mpom
7. nu ´mčɨn	20. ponoi te ´yiu
8. mo ´noš	21. ponoi teyao yɛt
9. no ´nɨp	22. ponoi teyao ponoi
10. te ´yao	23. ponoi teyao so ´pɨn,
11. yɛ ´čam	etc.
12. bo ´čtop	100. yɛt pi ´ča
13. so ´pi ´op	1000. yɛt mi ´la (Sp.)

GAMES

526 [616] Shinny.--This game (ko ´nɨč). was played by both sexes. The sticks and ball were of "some hard wood." Usually there were three people on each side; moiety opposition functioned when the game was played at mourning ceremonies. The Kechayi played the game around the turning post, which was not struck or aimed at.

Tossed hoop and pole.--E.M. had not seen this game (ha ´lao) played; she had "just heard the old people talk about it."

[237] Football.--For this game (i ´wač) two posts were set up about one hundred feet apart. A ball of deerskin stuffed with grass was kicked and scuffed along the ground between two opponents. They pushed each other vigorously to maintain possession of the ball. They started from one post, went in a circuit around the

[54] Cf. Gifford, Miwok Moieties, 146.

4: Gayton E-5 (1925-1930)1946

NS29 Yokuts NS29

Thus two types of environmental factor, topographic access or hindrance, and "weather permitting" or hindering, affected the economic relation of the foothill Yokuts with their neighbors. Easy access does not necessarily mean exchanges of goods or other cultural items, but barriers do retard them. On the other hand, differing environments mean different products, and had Eastern Mono products been identical with Yokuts (yet equally inaccessible) the impetus to exchange would have been wanting. The topographic barrier was surmounted, but the weather barrier could not be, and it presumably served to maintain the strangeness and hostility between Eastern Mono and Yokuts, which only was assuaged temporarily and periodically by the presence of the mutually acculturated intermediaries, the Western Mono.

As suggested by the adjustments of trading periods to the seasonal environment, the physiographic setting was a factor in other tribal relationships and directional emphases. The plain or floor of the San Joaquin valley is abruptly ended on the eastern side by the rising wall of the Sierra Nevada; there is no slow progression. Of the foothills, the most meagre are treeless cones planted at the edge of the valley floor; behind them are higher, larger, interlocking cones blending into sharply massed mountains above which stand snow-capped peaks. This topographic antithesis was reflected in non-material culture of the Yokuts. A directional distinction of eastward, upstream, mountainward (no´tu) versus westward, downstream, plainsward (to´xil; da´ṭu) gave names to the moieties (where they occurred): Nutuwich, Tokelyuwich; it regulated spatial arrangements at large ceremonies; wars and competitions in myths were attributed to uplanders and lowlanders; and in cosmogonic beliefs eastward beyond the mountains is the mysterious "home" of the supernatural animals, while westward beyond the ocean is the "home" of the dead, a place of feasting and merriment.

Other directions of the conventional six were also important.[19] North (hosi´m) and south (homo´t) were constantly used as general designations for other Yokuts people, individuals or groups, when the tribal name was not known, i. e., "northerner" (hoso´mo), "southerner" (humti´nin). East and west (nutu´wič; tokelyu´wič) were rarely used for directional labels for tribes, not because they were moiety names (which the Central Foothill Yokuts lacked entirely) but because the east-west span of the valley is short, and close knowledge of neighbors by tribal name ran along the east to west flow of the streams. Comparably, the intervening watersheds discouraged north-south travel. In general, westerner (to´kya) was a term for any people living far west or southwest of

19 Usually named in order: S, W, N, E, U, D. (No color symbolism was associated with direction.)